

Figure 1

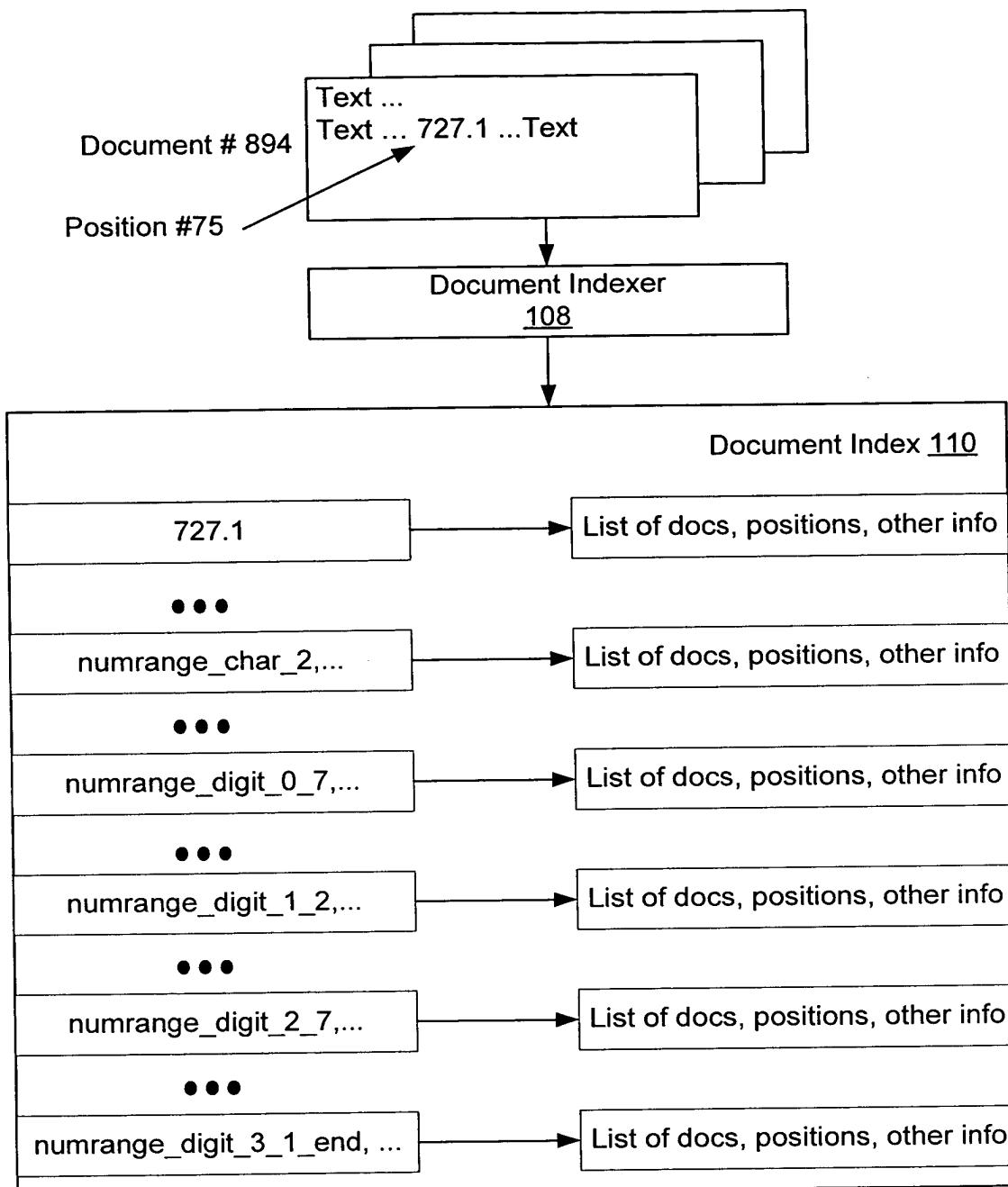


Figure 2

Numerical Index Term 300

fieldname	digit position	digit value	end flag	neg value flag	neg characteristic flag	other Info
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Figure 3

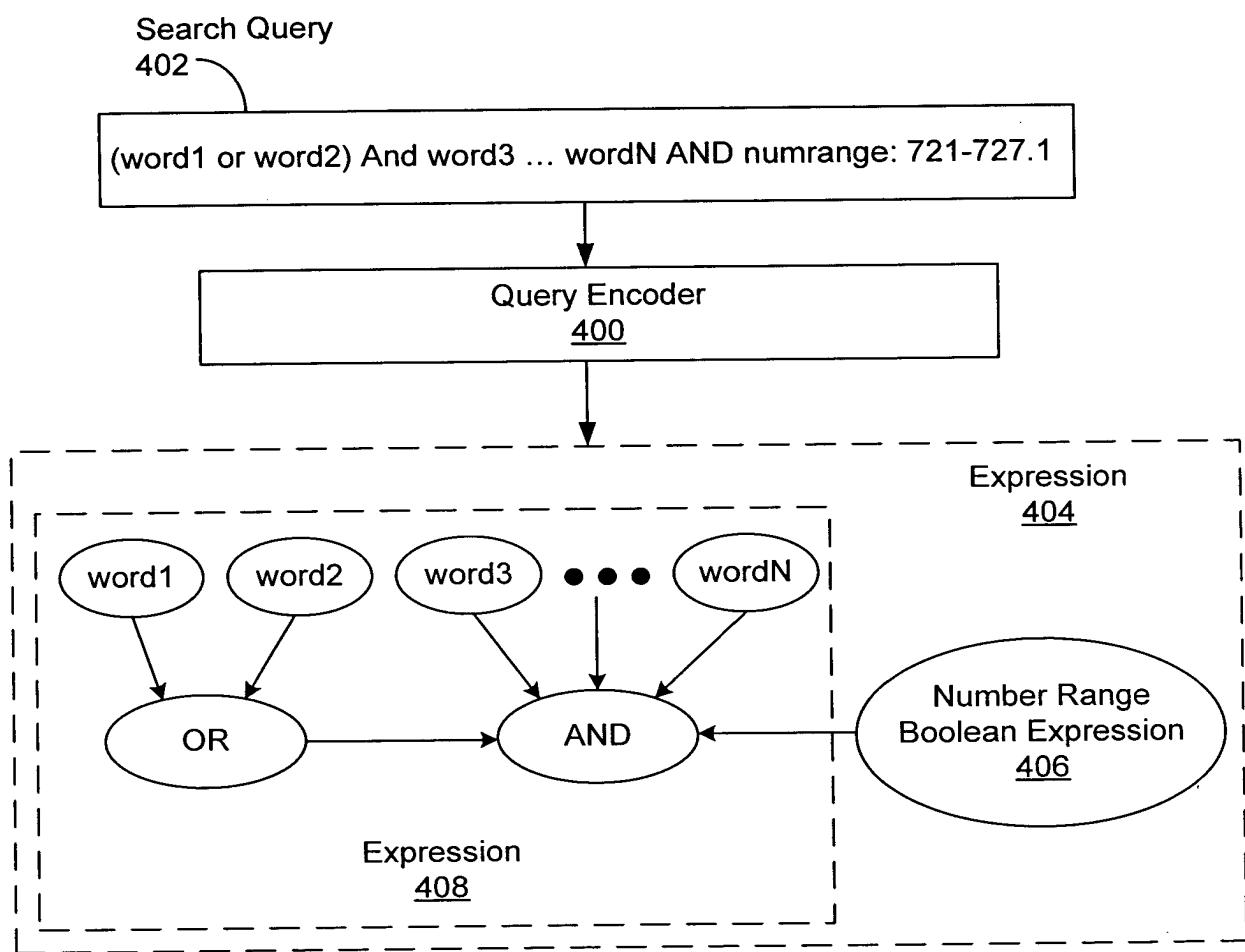


Figure 4

Boolean Expression Tree 406

----- Level 1

AND:

|---numrange_character_2
|---numrange_digit_0_7
|---numrange_digit_1_2

----- Level 2

|---OR:

|---numrange_digit_2_1
|---numrange_digit_2_1_end
|---numrange_digit_2_2
|---numrange_digit_2_2_end
|---numrange_digit_2_3
|---numrange_digit_2_3_end
|---numrange_digit_2_4
|---numrange_digit_2_4_end
|---numrange_digit_2_5
|---numrange_digit_2_5_end
|---numrange_digit_2_6
|---numrange_digit_2_6_end
|---numrange_digit_2_7_end

----- Level 3

|---AND:

|---numrange_digit_2_7

----- Level 4

|---OR:

|---numrange_digit_3_0
|---numrange_digit_3_1_end

Figure 5

AND:
|---<fieldname>_characteristic_2
---OR:
 ---AND:
 |---<fieldname>_digit_0_1
 ---OR:
 ---AND:
 |---<fieldname>_digit_1_8
 ---OR:
 |---<fieldname>_digit_2_9
 ---<fieldname>_digit_2_9_end
 ---<fieldname>_digit_1_9
 ---<fieldname>_digit_1_9_end
 ---<fieldname>_digit_0_2
 ---<fieldname>_digit_0_2_end
 ---<fieldname>_digit_0_3
 ---<fieldname>_digit_0_3_end
 ---<fieldname>_digit_0_4_end
 ---AND:
 |---<fieldname>_digit_0_4
 |---<fieldname>_digit_1_0
 ---OR:
 |---<fieldname>_digit_2_0
 |---<fieldname>_digit_2_1
 |---<fieldname>_digit_2_1_end
 |---<fieldname>_digit_2_2
 |---<fieldname>_digit_2_2_end
 |---<fieldname>_digit_2_3
 |---<fieldname>_digit_2_3_end
 |---<fieldname>_digit_2_4
 |---<fieldname>_digit_2_4_end
 |---<fieldname>_digit_2_5_end

Figure 6

```

OR:
---AND:
|---<fieldname>_characteristic_2
|---OR:
|---AND:
|---|---<fieldname>_digit_0_1
|---|---OR:
|---|---|---<fieldname>_digit_1_5
|---|---|---<fieldname>_digit_1_5_end
|---|---|---<fieldname>_digit_1_6
|---|---|---<fieldname>_digit_1_6_end
|---|---|---<fieldname>_digit_1_7
|---|---|---<fieldname>_digit_1_7_end
|---|---|---<fieldname>_digit_1_8
|---|---|---<fieldname>_digit_1_8_end
|---|---|---<fieldname>_digit_1_9
|---|---|---<fieldname>_digit_1_9_end
|---|---<fieldname>_digit_0_2
|---|---<fieldname>_digit_0_2_end
|---|---<fieldname>_digit_0_3
|---|---<fieldname>_digit_0_3_end
|---...
|---|---<fieldname>_digit_0_8
|---|---<fieldname>_digit_0_8_end
|---|---<fieldname>_digit_0_9
|---|---<fieldname>_digit_0_9_end
|---<fieldname>_characteristic_3 |---<fieldname>_characteristic_3_end
|---<fieldname>_characteristic_4 |---<fieldname>_characteristic_4_end
|---<fieldname>_characteristic_5 |---<fieldname>_characteristic_5_end
|---...
|---|---<fieldname>_characteristic_78 |---<fieldname>_characteristic_78_end
|---|---<fieldname>_characteristic_79 |---<fieldname>_characteristic_79_end
|---<fieldname>_characteristic_80_end

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Figure 7

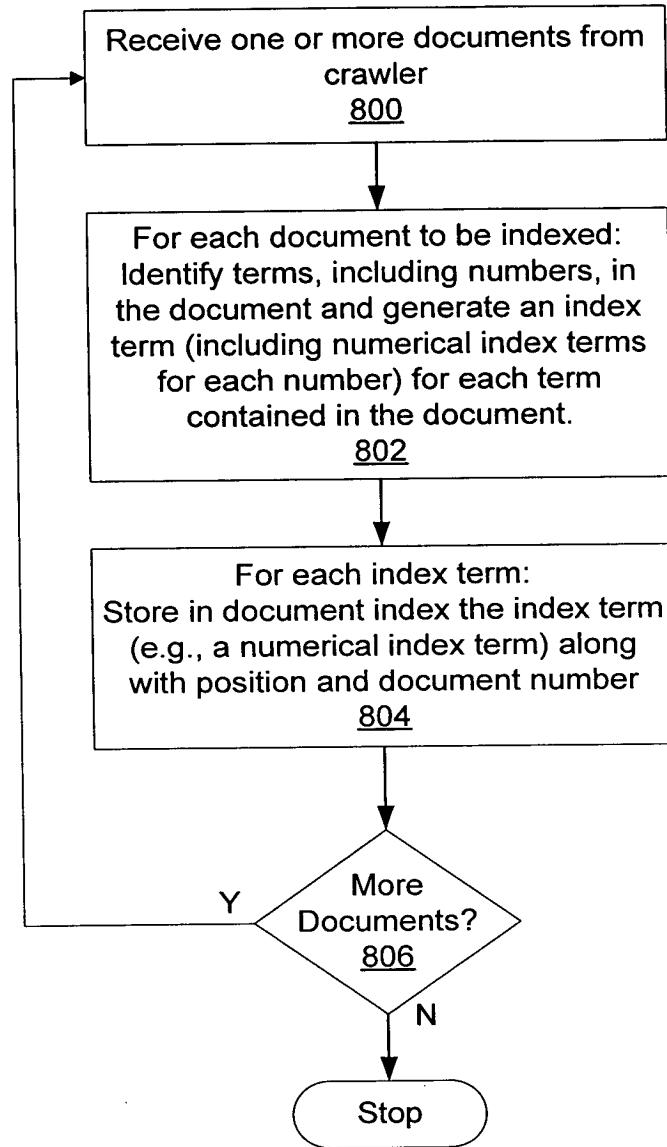


Figure 8

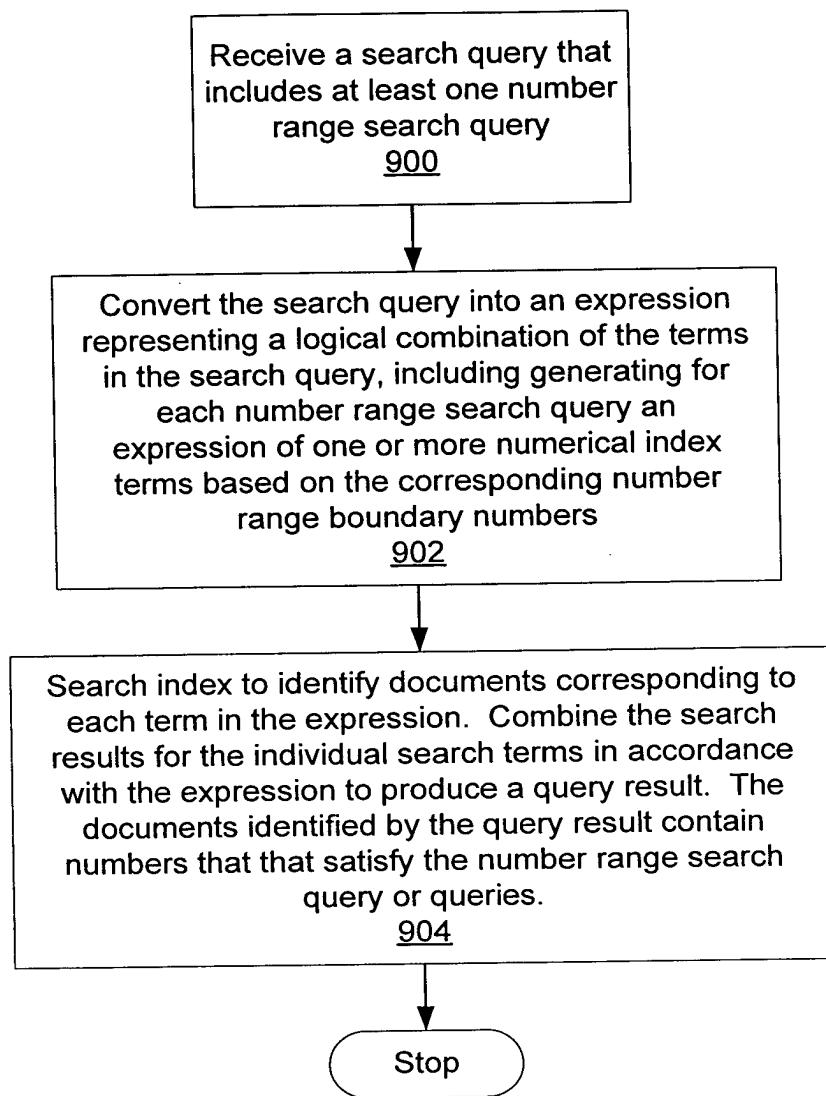


Figure 9

Indexing System
1000

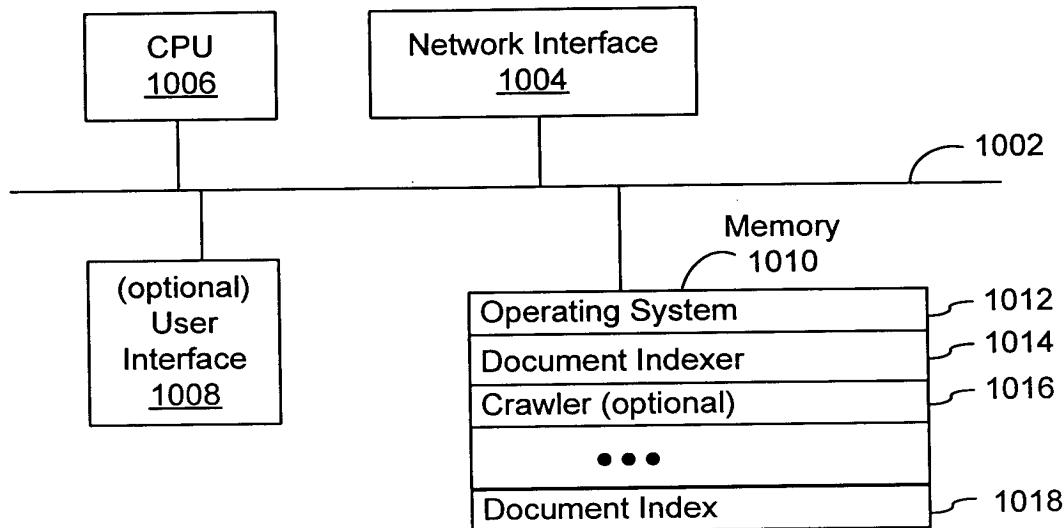


Figure 10

Query Encoding System
1100

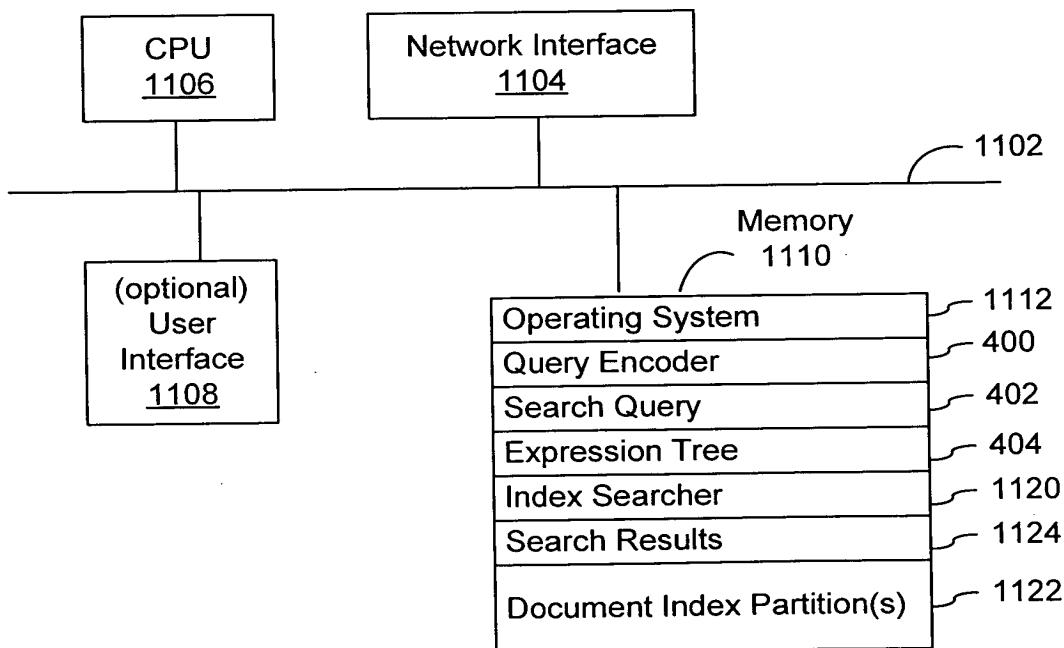


Figure 11